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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,887	06/20/2003	Gerard Marmigere	FR920020034US1	6788

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EXAMINER

GERGISO, TECHANE

ART UNIT	PAPER NUMBER
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2137

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/600,887	Applicant(s) MARMIGERE ET AL.	
	Examiner Techane J. Gergiso T-G	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 08, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 7,8 and 13 is/are objected to:
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a non-Final Office Action in response to the applicant's request for continued examination filed on November 08, 2007.
2. Claims 1, 3, 6-13 have been examined.
3. Claims 1, 3, 6, 9-12 are rejected.
4. Claims 7, 8 and 13 are objected as allowable subject matter.
5. Claims 1, 3 and 6-13 are pending.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jobst et al. (US Pat. No.: 6,707,915) in view of Koukoulidis et al. (US Pub. No.: 2003/0123669), and further in view of Stephenson et al. (US Pat. No.: 6,119,000).

As per claim 1:

Jobst et al. disclose a text messaging system for the encryption of at least one text message sent to a wireless terminal equipment, the text message comprising a Short Message Service (SMS) message having a User Data Header (UDH) an information data field and a text data field, the text messaging system comprising:

means for storing an equipment identification number uniquely assigned to the wireless terminal equipment, wherein the assigned equipment identification number is an International Mobile Equipment Identity (IMEI) number of the wireless terminal equipment (Column 6: lines 31-47; Column 7: lines 5-15; Figure 3; figure 5: 1);

means coupled to the equipment identification number storing means for encrypting the text data field content of the SMS message using only the equipment identification number assigned to the wireless terminal equipment as the shared key (Column 2: lines 20-45; Column 6: lines 57-67; Column 7: lines 1-36);

and means for setting an encryption identifier in the information data field of the at least one text message (Figure 8: 63,64,65,66).

Jobst et al. do not explicitly teach the encryption and decryption system is carried out using Short Message Service (SMS) system. Stephenson et al., in an analogous art teach the encryption and decryption process is carried out using Short Message Service (SMS) system (Figure 2A: 20; Figure 4: 460; Figure 5: 20; Page 1: 0018). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Jobst et al. to include encryption and decryption process is carried out using Short Message Service (SMS) system. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to secure transaction and communication utilizing SMS as suggested by suggestion provided by Koukoulidis et al. (Page 1: 0005, 0007, 0018).

Jobst and Koukoulidis do not explicitly teach an Information Element (IE) group of the UDH of the SMS message, the encryption identifier comprising a marker in an IE data field, the IE group further comprising an information Element Identifier (IEI) field set to indicate a presence of the marker, and an Information Element Data Length (IEDL) field set to indicate a length of the marker. Stephenson et al., in an analogous art, teach an Information Element (IE) group of the UDH of the SMS message, the encryption identifier comprising a marker in an IE data field, the IE group further comprising an information Element Identifier (IEI) field set to indicate a presence of the marker, and an Information Element Data Length (IEDL) field set to indicate a length of the marker (column 11: lines 35-55; column 12: lines 60-67; column 13: lines 1-5; column 19: lines 1-15).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Jobst and Koukoulidis to include an Information Element (IE) group of the UDH of the SMS message, the encryption identifier comprising a marker in an IE data field, the IE group further comprising an information Element Identifier (IEI) field set to indicate a presence of the marker, and an Information Element Data Length (IEDL) field set to indicate a length of the marker. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to provide a method of tracking identity-code in a communication system in which a plurality of user stations can simultaneously conduct respective communication transaction during which signaling messages are exchanged with the remainder of the communication system as suggested in (column 2: lines 1-10).

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As per claim 2:

Jobst et al. disclose a system, wherein the at least one text message is a Short Message Service (SMS) message and said assigned equipment identification number is the International Mobile Equipment Identity (IMEI) number of (Page 2: 0032). said wireless terminal equipment (Column 5: lines 10-21; Column 2: lines 20-45; Column 6: lines 57-67; Column 7: lines 1-36).

As per claim 3:

Jobst et al. disclose a system, wherein the text data field of the SMS message comprises configuration commands to remotely manage the wireless terminal equipment (Column 6: lines 20-30; Column 2: lines 1-13)).

As per claim 4:

Jobst et al. disclose a system, wherein the information data field of the text message further comprises a header part and a body part, and wherein the encryption identifier is set in the body part of the information data field (Column 3: lines 1-21).

As per claim 5:

Koukoulidis et al. disclose a system, wherein the encryption identifier is set in an Information Element group of the SMS message (Figure 1B: 150).

As per claim 6:

Koukoulidis et al. disclose a system, wherein wireless terminal equipment is a Short Message Service (SMS) receiving mobile device and said SMS message is carried over a wireless network (Figure 4: 400; 460).

As per claim 9:

Koukoulidis et al. disclose a system, wherein the means for generating an encrypted SMS message further comprising means for processing an encryption algorithm to compute a bit string using said assigned equipment identification number as the shared key and the text data field content (Page 2: 0032).

As per claim 11:

Jobst et al. disclose a method for authenticating a text message sent by a text messaging system to a wireless terminal equipment (Column 10: lines 33-49; Figure 7) having means for storing International Mobile Equipment Identity (IMEI) number (Column 6: lines 31-47; Column 7: lines 5-15; Figure 3; figure 5: 1) the text messaging system (Column 5: lines 10-21) comprising

means for storing International Mobile Equipment Identity (IMEI) number, the text message system comprising means for storing an IMEI number uniquely assigned to the wireless terminal equipment (Column 2: lines 20-45; Column 6: lines 57-67; Column 7: lines 1-36), and

wherein the text message comprises a Short Message Service (SMS) message having a User Data Header (UDH) and a text data field, the method comprising the steps of:

at the text messaging system (Column 5: lines 10-21):

encrypting the text data field content by using the equipment identification number assigned to the wireless terminal equipment as the shared key (Figure 8: 65);

setting an encryption identifier An Information Element (IE) group of the UDH of the SMS message, the encryption identifier comprising a marker in an IE data field, the IE group further comprising an information Element Identifier (IEI) field set to indicate a presence of the marker, and an Information Element Data Length (IEDL) field set to indicate a length of the marker (Figure 7: 206); and

sending the encrypted SMS message to the wireless terminal equipment (Figure 5: 41);

at the wireless terminal equipment (Figure 5: 1; Phone);

receiving the encrypted SMS message (Figure 7: 205);

determining if the received encrypted at least one text message contains an IMEI number as a shared key encryption (Figure 7: 208); and

decrypting the received encrypted SMS message using the IMEI number of said wireless terminal equipment as a shared key (Column 11: lines 50-59).

Jobst et al. do not explicitly teach the encryption and decryption process is carried out using Short Message Service (SMS) system. Koukoulidis et al., in an analogous art teach the encryption and decryption process is carried out using Short Message Service (SMS) system (Figure 2A: 20; Figure 4: 460; Figure 5: 20; Page 1: 0018). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Jobst et al. to include encryption and decryption process is carried out using Short Message Service (SMS) system. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to secure transaction and communication utilizing SMS as suggested by suggestion provided by Koukoulidis et al. (Page 1: 0007).

Jobst and Koukoulidis do not explicitly teach an Information Element (IE) group of the UDH of the SMS message, the encryption identifier comprising a marker in an IE data field, the IE group further comprising an information Element Identifier (IEI) field set to indicate a presence of the marker, and an Information Element Data Length (IEDL) field set to indicate a length of the marker. Stephenson et al., in an analogous art, teach an Information Element (IE) group of the UDH of the SMS message, the encryption identifier comprising a marker in an IE data field, the IE group further comprising an information Element Identifier (IEI) field set to indicate a presence of the marker, and an Information Element Data Length (IEDL) field set to indicate a length of the marker (column 11: lines 35-55; column 12: lines 60-67; column 13: lines 1-5; column 19: lines 1-15).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Jobst and Koukoulidis to include an Information Element (IE) group of the UDH of the SMS message, the encryption identifier comprising a marker in an IE data field, the IE group further comprising an information Element Identifier (IEI) field set to indicate a presence of the marker, and an Information Element Data Length (IEDL) field set to indicate a length of the marker. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to provide a method of tracking identity-code in a communication system in which a plurality of user stations can simultaneously conduct respective communication transaction during which signaling messages are exchanged with the remainder of the communication system as suggested in (column 2: lines 1-10).

As per claim 12:

Jobst et al. disclose a method of determining if the encrypted SMS message contains configuration commands to remotely activate the wireless terminal equipment (Column 4: lines 40-51).

Allowable Subject Matter

8. Claims 7, 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Short Message Services (SMS) text messages may be exchanged between mobile devices through Short Message Service Centers (SMSC) and SMS enables the receiving mobile devices to be remotely managed by remote device management application system. Such specific SMS results in parameter change commands or software elements to be applied to the device as configuration SMS.

The use of SMS exposes the device to malicious attempt. If the SMS carrying of malicious origin, commands SMS can introduce malicious entities into the terminal equipment (e.g. undesired parameter changes, personal information retrieving, virus code downloading to name session both cases, the device few). If the SMS is used to trigger management spoof server, similar malicious actions may be performed over the management session. These require to secure SMS against hacker attacks.

If the object claims are rewritten in independent form including all of the limitations of the base claim and any intervening claims, the claimed invention in allowable condition provide a system a method to secure remote management of a wireless device using configuration SMS's and also prevent malicious use of SMS's when remotely managing wireless user terminal equipment.

Claims 8 and 10, which directly or indirectly depend on claim 7 are also objected.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See the notice of reference cited in form PTO-892 for additional prior art

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Techane J. Gergiso whose telephone number is (571) 272-3784 and fax number is (571) ~~273-3784~~. The examiner can normally be reached on 9:00am - 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T-G

Techane Gergiso

Patent Examiner

Art Unit 2137


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER

January 11, 2007